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(54) **SYSTEM AND METHOD FOR LASER CUTTING SAPPHIRE USING MULTIPLE GAS MEDIA**

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ABSTRACT

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A system and a method for manufacturing a sapphire part. A sapphire substrate is obtained for performing a laser cutting operation. The sapphire substrate is cut along a cut profile using a laser and a first gas medium. The first gas medium is substantially comprised of an inert gas. The sapphire substrate is then irradiated at or near the cut profile using the laser and a second gas medium. The second gas medium is different than the first gas medium comprising oxygen.

